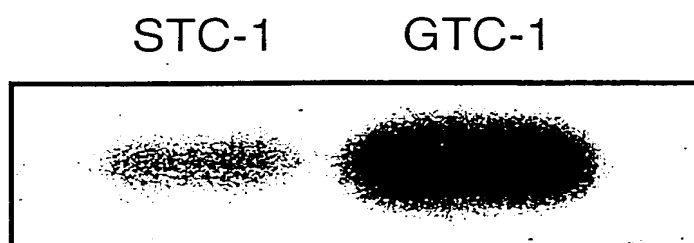
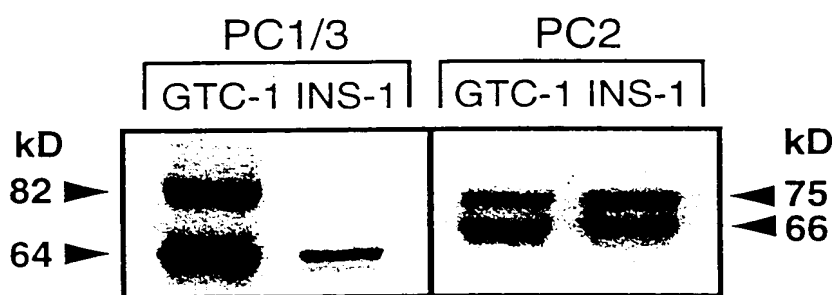


**Figure 1**



**Figure 2**





### Figure 4

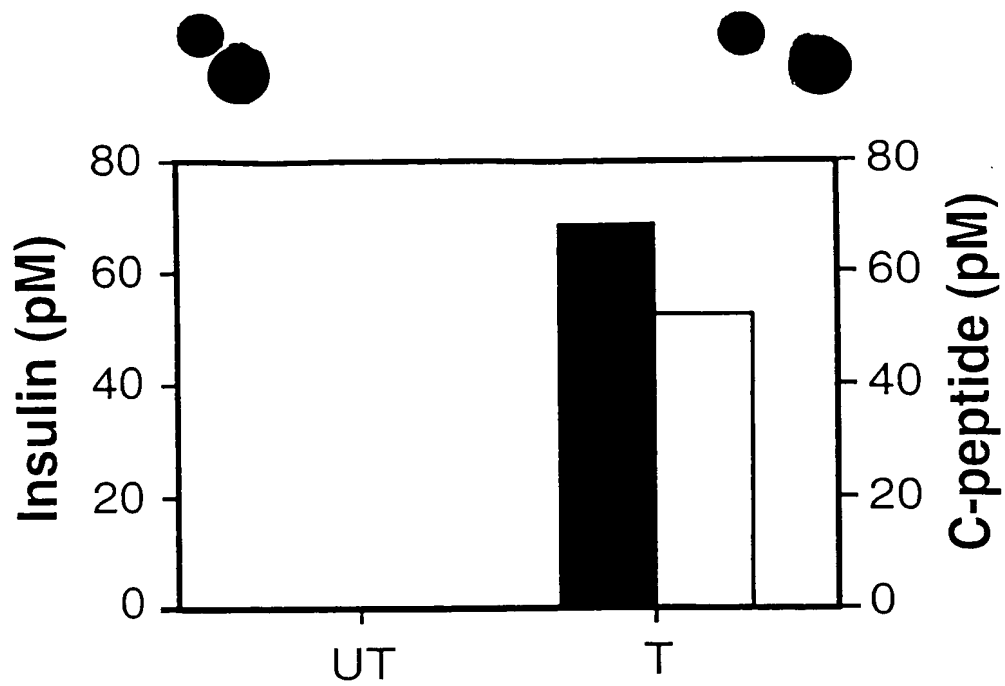


Figure 5

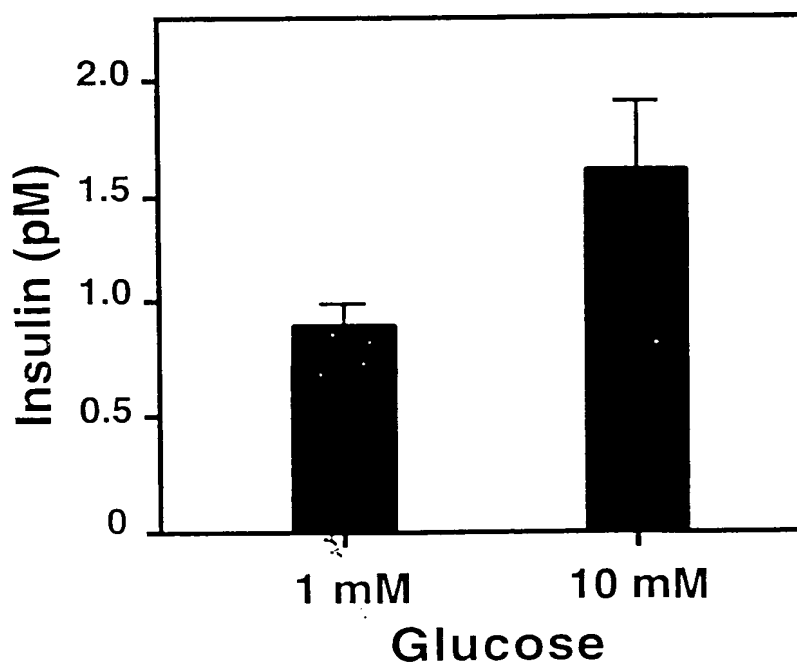
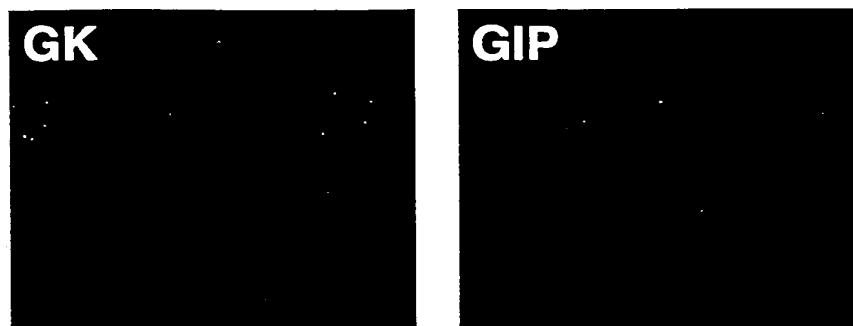
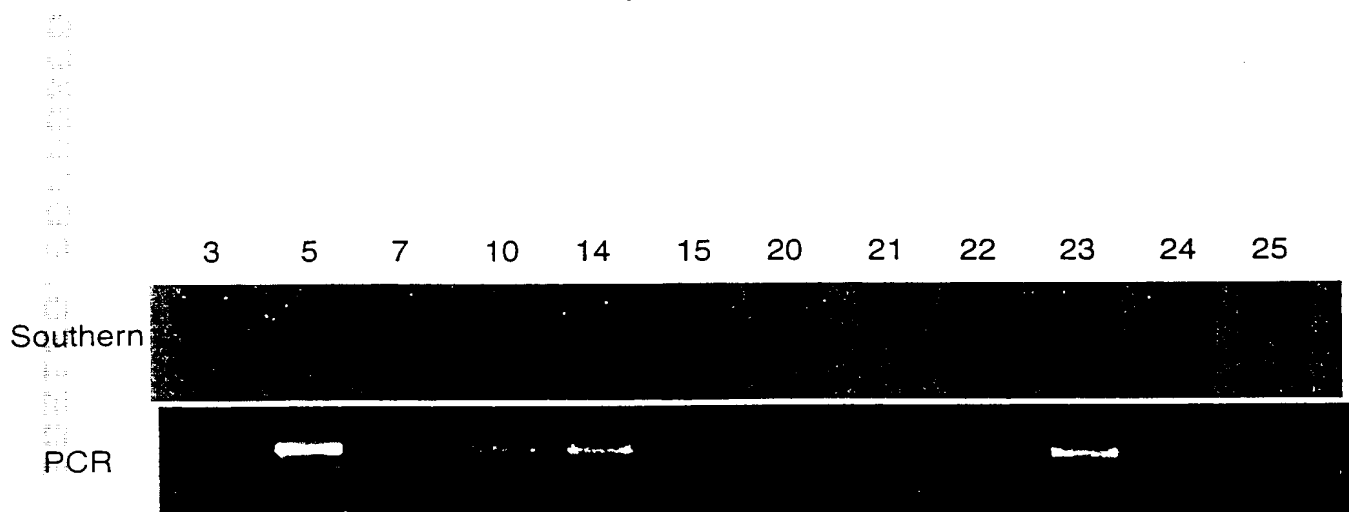


Figure 6



**Figure 7**



**Figure 8**

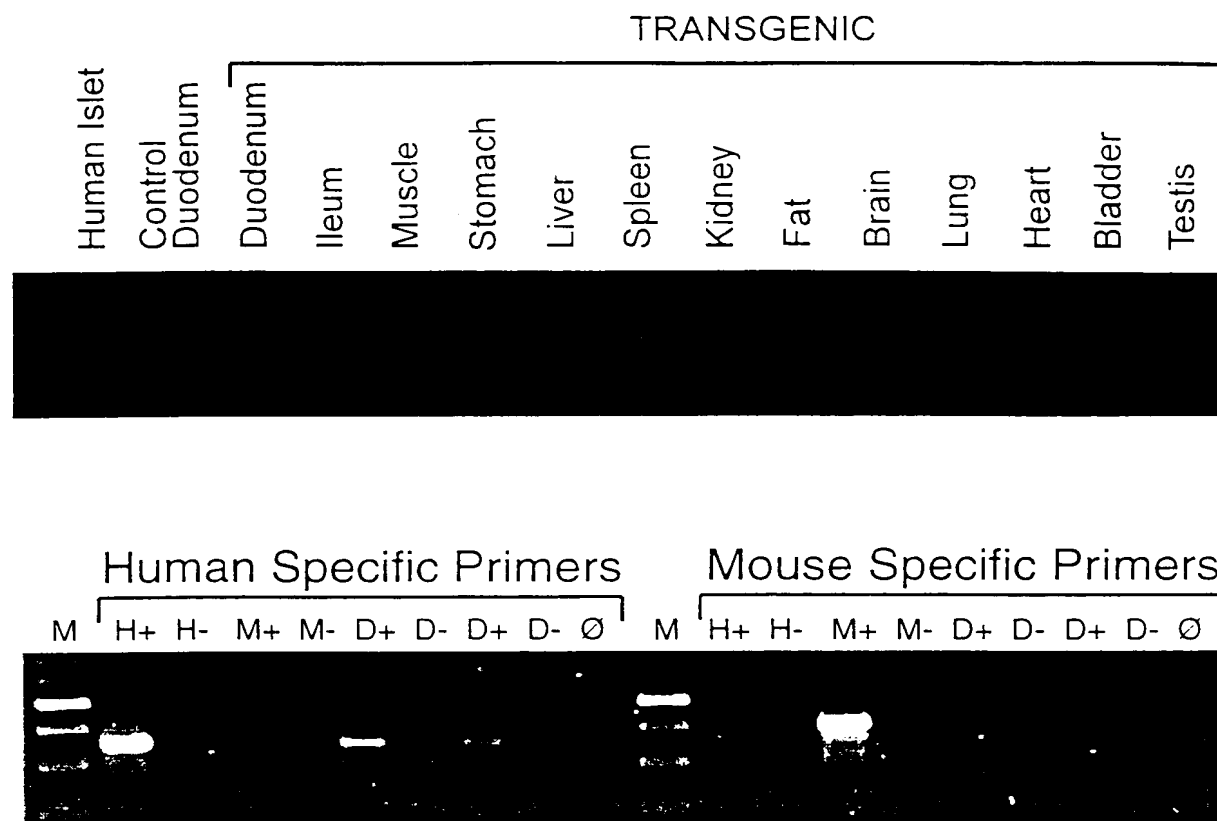


Figure 9

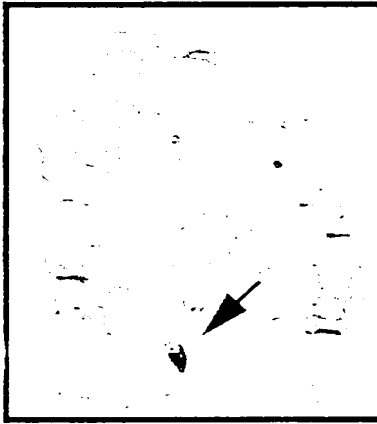
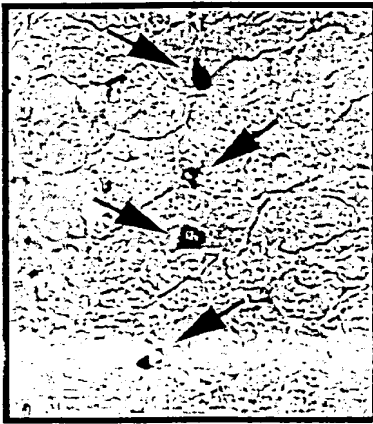
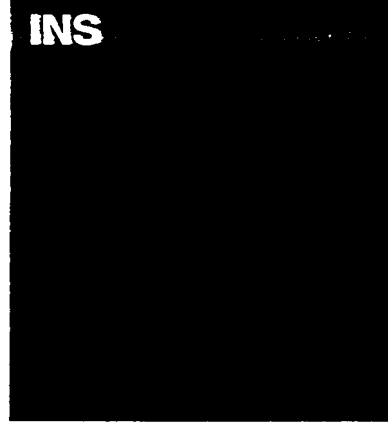
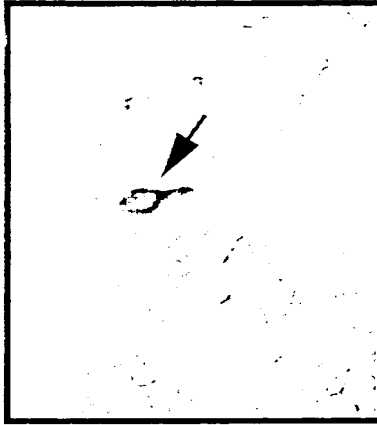


Figure 10

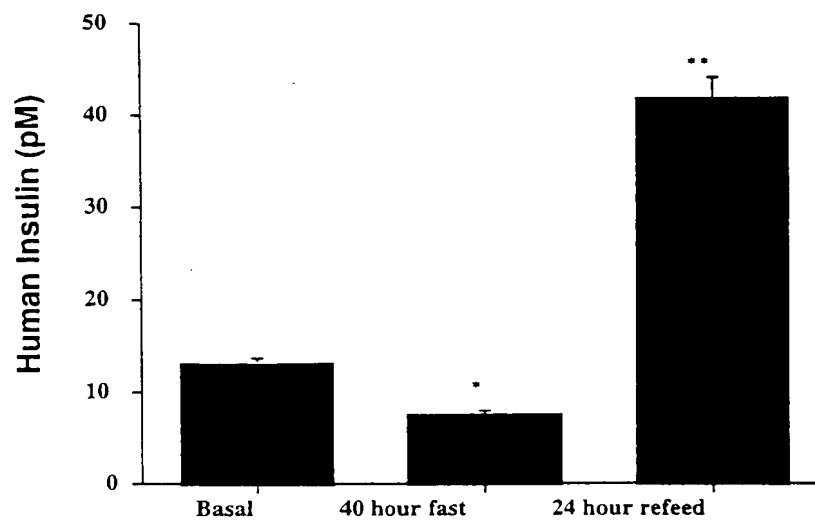


Figure 11A

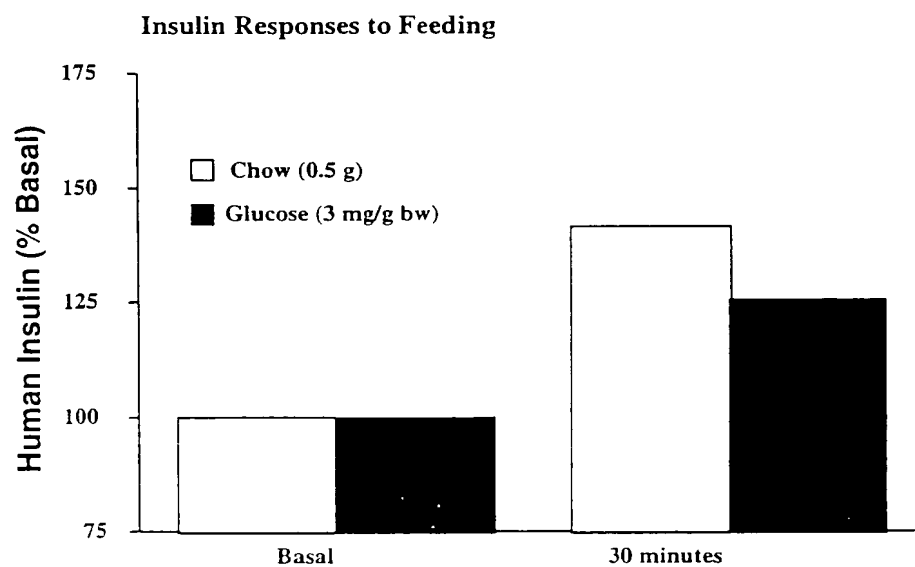


Figure 11B



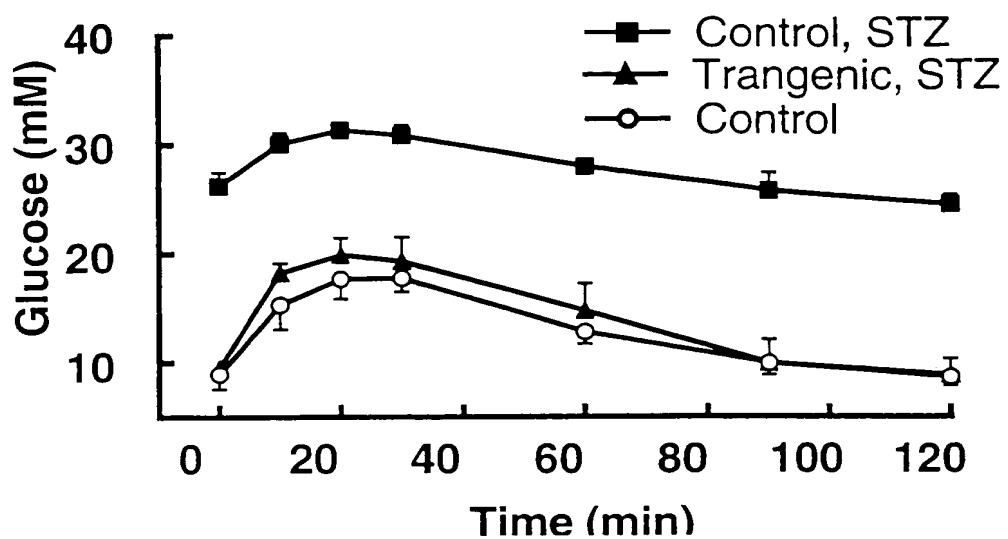


Figure 12

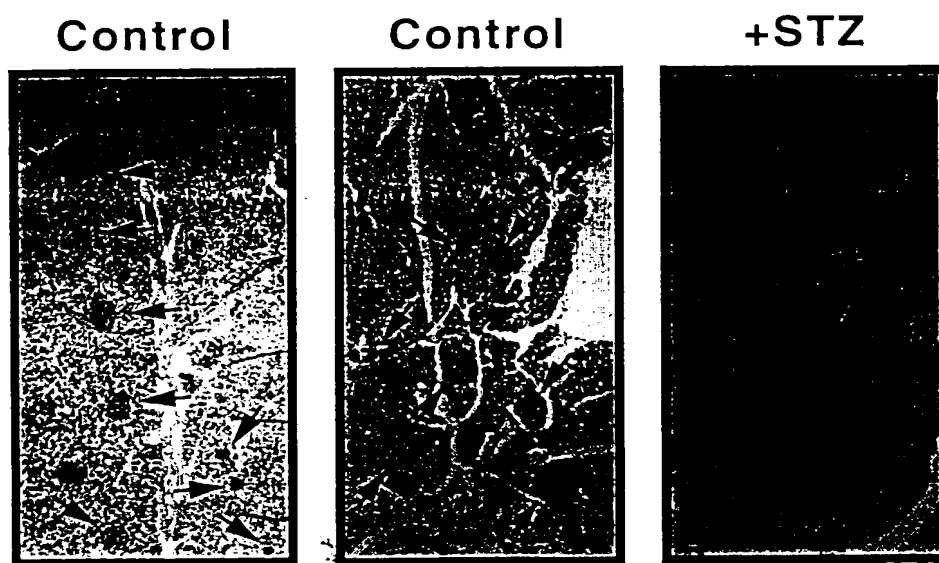


Figure 13

# GIP Promoter

atctctccag tcccttctc aaccttctga gaacaggcaa actccacat gattggctta  
 taaatcgta tatggaccta ctaaggatgt aacaactggg agcatgctta ctagcatgt  
 ccgaaacccg gagttcagtc ctagcactg cacaatctca gtcctatga agtagagga  
 agatcagagg ttcaaggaca acatcaatt gagaccagcc tgggctactt accaaagaaa  
 gaaagagaga aataaataa tagatagata aataaataa taagtaaata aatatctat  
 ggctggagag ttggttcagt gtttaagagc acttattgtg ggggtgggga ttagctcag  
 tggtagagcg ttgcctagg aagctcaagg ccctgggttc ggtccccagc tccggaaaca  
 aaacaaaaca aaacaaaac aaacaaaaca acaaaaaacc ctgtctggaa aacacctaaa  
 taaagatata tatatataat atatatacat ataataata tatgatata atatataat atatcttgt  
 ggaggaagct atacctttt ttcttgagcc tccaacacat aaatgtgcc tgctatccca  
 tctatattgc ccaagtggg aaacctatg actataaact ctaagttct agtcactagg  
 aacttcaag acacctacct caggcagcat cactccgga gtgccacct tatcagttaa  
 cateccatc tgggattcag atccagatc cttctgttc ctcagaagt cacctacagc  
 ttgtggggg tgccttcc ctcagagagt gccaccgag ttgacctca ccaaggcaac  
 ctttgtacc cacagaatcc aacaggaagt aggggggaga acagccggcc ctgtcccg  
 aaaaaagag gggagggaga aggggggtgt cagctacca cgggcaggt ccagataac  
 actgcagata cccaaatgtt aatcacccat tagcacaggc ccagagcaa ggggaaagt  
 attaggtgta taatggggt cactgggcag gaccagtggg cttgagctc aaagataaga  
 ggtttcagg ttaatcaga ccctgtgtg tgtggatata aggaagctaa cacagggtct  
 tgaagcaaga tctgag

Mouse chromogranin A (Chga) gene, promoter region.  
 ACCESSION L31361

1 ccgaattac ccactacgtt ggaattctat aagggttggg ttgtgttt tgttacagc  
 61 tgcgtcttg gcaccagca cagctgagt gttctaagcc cagtcgatg ctaacacat  
 121 ggttgtgaa tgaatacacg cgaagccggt tctcatttag gggcatgagt aggcagaggt  
 181 gtgggcagga agcaggaaag agcggaaaca ggtgcggaca gaaaggagg gctctgaagg  
 241 atgcagtcga gtgccaaact gtcattcaga taccagggtt actgtggccc taggccaggc  
 301 tgcacggggc tcccatgtg gtcgtcccag ggtgagagca gaactgcggg gggcggggca  
 361 gaaggaaacc aaccaggaag cagggttgca ccaaaattat ccaggttta agtacattta  
 421 agagacaagg ctgggctgtt gaaggtcaga ggtgtccctg ggggtgctgga ctaggactga  
 481 ccacttctgt tttagtttaa tggtagaac tgcctcacac tgctacctgc ctacttgcc  
 541 ccttgagagc tgtgagccta ggaccaccc atgtgtgggt tggaccttca gtcacacat  
 601 gaactgtgtt gaagccactg gttgtcagag cagggtcttc ggcactgagg aagcagtgc  
 661 cactatccc tatcaataa caattaaata cacacagaat gcgaggcaca caactgagt  
 721 tcaggagagg cctcgctcag gcaaggggtt caagaggctt ctgtgggacc cgctggatgt  
 781 tccaggaggt tctaaagat gggcgtgcct ccagccaagt gaaatcaaga gaaaagtacg  
 841 cgaagtatag gaaaactcag cagtctggag aggtaaatag gggaggaatc cgaggctcag  
 901 agacaggagt gacttgcaca cggacgcaca gcaagtggc aggtggagt cagctgtgcc  
 961 acctctgaa gccgggtacc ctttacacc accagataca agcgggatag agacagctga  
 1021 tggagaagct ggaggtggg ggcgggacc cgaaggtggg gaaaggcgcg gggggggcgg  
 1081 tctatgacg taatttctg ggtgtgtgcg cgcgtgtgcg tgcgtgtgcg tgtatataa  
 1141 agccggcata gcattgtgc tgcgtccgc gccaccgcca ccatcacgc tgttaccacc  
 1201 accgtactg cagtgttccc gctgtgcag agctttgta gccagactac agaccactc  
 1261 ccgccatct cctgcagcag ctgtccact cttccgcac cgtccggctc gctatgcg

//

Figure 14

Mus musculus secretogranin II (Scg2) gene, promoter and exon 1, complete sequence.  
ACCESSION AF037451

```
1 gggaacttct tctagctctt tcattagggg cctgtgttc catctaatag ctgactgtga
61 gcatccactt ctgtgcttgc caggcactgg catagcctca caagagacag ctatatcagg
121 gtctgtcag caaaatcttt ctggcatatg caatagtgtc tgggtttggt gggtgtatat
181 gggctggatc cccgggtggg gcagtctctg gatggtcttt cctccgtct tagctccaaa
241 cttgtctct gtaactcctt ccatgggtac ttgtttccc attctaagaa ggagcaaaagt
301 atccacactt ccttctctt ccttctctt gagttttgca aatgccacaa aactttcaaa
361 gccttctgaa tagccttctc tttagtgtt tccaatgtat attaaaataa tctatctttc
421 atccccattg attaaagcct tcttaaagcc agaaaactat attcattttt ttctttccc
481 agtagttcac aaactatctg gcacctcata agcatcataa ctcagttggt gggtagataa
541 aattggaatg tgattgttca gtcagcagag acttttagag gacctcatal aacaagattc
601 tctcagttct cagaaatata ttcagtata tacagggtta gaggactcac atctttaata
661 aaataaagtt aaaaatttag acctgtataa attattaagg tacctaatac agttccacgg
721 caaagtacag ccatggttat gaattataaa tccaagaagc ggtgggttaa ctctgacatt
781 gttecttggg tggttctcat tcattgaagt tagtcacctc aacttactca accaaaacct
841 agaagtattt ctgtggtact atgttctctt gatgccaaga gggctctagg catatgaaaa
901 tcttcaatc tctctccctc tctctcccc ttccaccccc actctctctc ttctagcagt
961 aateccctcc ttctggttag gcagtatgtt tttggagca cagtttctta gctatctctt
1021 gcaacacctg attttgctga agatttgaat ggctcatat agaagtatca acaacttgag
1081 cgtctgtgaa ctctcatttt gacactgtgc tgaagaatg ggagttgatt ctcattaaaa
1141 aaaaaattaa gcattcacc tttttgtc aaactaaaca gttttaaaac agttctgctt
1201 ggagtcataa tatgaaatac gatctatcat atttgaatg ttctgttcaa ttgtggctgc
1261 accaggaaat gagaagctat ttctttatag gcacaaataa aaagatagtc attatctgta
1321 aaattcttat gacatggcag caagcccaag aaacctttct aaacaaggcg tgaaaacgca
1381 gagatgtcct tgcaattagt catgtctatc tgacagattt ctctcttct aagggaattt
1441 gtgtgaaca ttttatttc agcctcagag ataaaagaag ggggaagaag ctgtagttt
1501 tgctacataa gacaggtggc gtaagcatgc aacgctttaa aaaaatatct aaagtgattg
1561 tttctctcg gattcttga aaaagctcgc ctgcgctggg gtttgaggct gagccgggtga
1621 cgtcagcgtg gaatgcggag tcaggcgccc aggtctctta taagccgagg agctgtccgg
1681 tgctgaaacg gcccagccc tactcagcg gcagagagga gcatgcttgg agcctccac
1741 ataataaag acagaggtaa
```

//

Mus musculus glucokinase gene, 5' flanking region.  
ACCESSION U93275

```
1 agctttaggt gtgtgaatat ctactttggt gctagggcct tggtcatact aagtaagtt
61 ccccttact ggggtgtacc agtttaccct ggactgtcta agcaacaaga aggatagaca
121 tggcctacca cagatttcat gtctgccact ggctatgtca gaacatgtag gagcttttgg
181 aatcagtga acaggtattt tcagactgcc ttccctgcgt ggggctttcc cgaagccata
241 ttttcttag agtcagcctt tccagctga ggacaagctg tactggacag atgccagcca
301 ctgaaactgg gaatacatgg tcatttaggc agctggctta tctatccat ggtacttgat
361 ggcttcgggt cagcacctca cagaagttc agacgggagg ctccgagaa aacagagaag
421 caggcaggag atcctgcagg caatctctct gctccacagc ctgcatggac ttccctcagc
481 cttagtgcgt gtgggtccca tctgagaaca ttggttatat gttattttca aaccgatctg
541 cctttaagga gtggaagaaa aaaactgtgg tgtttgggct acctttatga taatggcctt
601 ttcatctcc taataaatat tgccaagtag ggtagattct atacgaaagc tcttaaccca
661 ttgtattagc aaatcatgta ggtgctaata atgaatactg gatgcagtca gtacagggat
```

Figure 15

721 ataaaatgga atgtaagagc ctgttgctat gaatggtag ctaactagat gttgtacaag  
 781 aaatgttgac gttatgacgt gtggaaactt ggtattgaag atgtggactc gaaactttgt  
 841 ggattttttg atgcatgat aaaaatgtga agaatactgt tccttacc aaagaagaag  
 901 aagaaggaga aggaggagga agaggaggag gaggaagaag agggggagga agaagaagag  
 961 aaggaggagg aagaggagga ggagggaaga gaggaggagg aggaagaaga agagaaggag  
 1021 gaggactagg aggaggagga gaagaaggag aaggggagg agagagtagc cagaacattt  
 1081 ggggtgccat cagaatacca gatactccag acatagtcac agaaggactg gttgtttgt  
 1141 taaatagggtg ctttgaaga tttgtggga aacctgcagt gagatttgt gtcttagaaa  
 1201 tgataggcaa gattcatcca caagaatgcg acaagatggc tgcctgaaca agccctgaac  
 1261 attaacagca ccagtagacc tgcttacacg gaagaaagca atctcatagg cctcaccctc  
 1321 aaacaaagac tacagacagc agaggaaactg gagagcagga gaaattgggt ctccctttta  
 1381 tgagccccct aactggttgt caaatactca atggtcagcc ctgaaatcat atgcacaaag  
 1441 taatactagc gcaactgaac agattgtagc tgtgtgtgtg tgtgtaatga taacaaagaa  
 1501 gaaaaggccc catgttagag agggagcaag gtgggcatgg aggtatggaa ggagttggaa  
 1561 ggagggtgga gaaggggaaa gtgatgtaat tatcttttaa ttataaaaa aataaaaaat  
 1621 gggctggtga gatggctcag tgggtaagag caccgactg cttctccga aggtctggag  
 1681 ttcaaatccc agcaaccaca tgggtgctca caaccatccg taacgagatc tggcgccctc  
 1741 ttctggagtg tctgaagaca gctacagtgt acttacatat aataaataa taaatctttt  
 1801 aaaaaaata aaaaaataa tattagaata aaatgtagag gaatatttt aatttaaca  
 1861 cttgggtgtg gcaaaagctt tctcaacaa aaacttaac ctcagataa gaaaagacta  
 1921 gaatccacga cgtggataga tacttctgta tgatgcaaga cactatttat caggtttaa  
 1981 cttgagcaga acttgagttg taactgttg ggaaacacaa caccctggc aaacaaaaga  
 2041 ttactagata tttagatga aatataaaaa tactttccac aactgatagg taggaaacag  
 2101 ttcaatagta atataattat tgaacaaata atccttaaaa gaagaaatcc agaggaaatag  
 2161 caagttaggg gaagagaggg tgtgtgtgtg tgtgtgtgcg cgcacattta tagccaaaat  
 2221 agatgatata cttaaatgaa catgccatta aaaccatta tttgcatac agtttacata  
 2281 tgctaatgaa tacttaaaaa aaaaacattg ggattggaga gaaatggctc agtggttaag  
 2341 agttcaatc ccagcaacca catgattgct cacaaccatc tgtaatggga tctgatgcct  
 2401 tcttctggtg tgtctgaaga aagtgaccgt gtacttataa ttataataa ataaatcttt  
 2461 aacaaaaaaa ccccataat tcaacaaca gatatgtcct ggtctgaggc tccaggcat  
 2521 agaaatagaa acacacagag tgtggagcca gtgcggttca ggtccgcat tccagttcag  
 2581 gcttcagacc aagagaaagg gaaaagaaga gacaagcaac aag

H.sapiens adenosine deaminase (ADA) gene 5' flanking region and exon 1 (and joined CDS).  
 ACCESSION X02189

1 tccaggaaat gcgcatcca ggccggcggg cggggcgggg gctccggcga gagggcgggc  
 61 cccgggaacg gcggcgggag gggcgggagg cggggcccgg cccgttaaga agagcgtggc  
 121 cgccggcggc caccgctggc ccagggaaa gccgagcggc caccgagccg gcagagaccc  
 181 accgagcggc ggcgaggga gcgacgccgg ggcgacgag ggcacc

Homo sapiens mRNA for pre-proinsulin.  
 ACCESSION X70508

MALWMRLLPLLALLLWGPDPAAAFVNQHLCGSHLVEALYLVCGERGFFYTPKTRREA  
 EDLQVGVQLGGPGAGSLQPLALEGSLQKRGIVEQCCTSICSLYQLENYCN"

1 gctgcatcag aagaggccat caagcacatc actgtccttc tgccatggcc ctgtggatgc

Figure 16

61 gcctcctgcc cctgctggcg ctgctggccc tctggggacc tgaccagcc gcagccttg  
 121 tgaaccaaca cctgtgcggc tcacacctgg tggaagctct ctacctagtg tgcggggaac  
 181 gaggtctctt ctacacacc aagaccgcc gggaggcaga ggacctgcag gtggggcagg  
 241 tggagctggg cggggggcct ggtgcaggca gcctgcagcc ctggccctg gaggggtccc  
 301 tgcagaagcg tggcattgtg gaacaatgt gtaccagcat ctgctccctc taccagctgg  
 361 agaactactg caactagacg cagcccgag gcagccccc acccgccgcc tctgcaccg  
 421 agagagatgg aataaagccc ttgaaccagc

Homo sapiens leptin (LEP), mRNA.  
 ACCESSION XM\_004625

"MHWGTLCGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTG  
 LDFIPGLHPILTLKMDQTLAVYQQLTSMPSRNVIQISNDLENLRDLLHVLAFSKSchLP  
 WASGLETLDSLGGVLEASGYSTEVVALSRLQGSLLQDMLWQLDLSPGC"

1 tctgttttca ggcccaagaa gcccatcctg ggaaggaaaa tgcattgggg aaccctgtgc  
 61 ggattcttgt ggctttggcc ctatctttc tatgtccaag ctgtgcccac caaaaaagtc  
 121 caagatgaca ccaaaacct catcaagaca attgtcacca ggatcaatga catttcacac  
 181 acgcagtcag tctctccaa acagaaagtc accggtttgg acttcattcc tgggtccac  
 241 cccatcctga ccttatcaa gatggaccag aactggcag tctaccaaca gatcctacc  
 301 agtatgectt ccagaaacgt gatccaaata tccaacgacc tggagaacct ccgggatctt  
 361 ctacagctgc tggccttctc taagagctgc cactgccct gggccagtgg cctggagacc  
 421 ttggacagcc tggggggtgt cctggaagct tcaggctact ccacagaggt ggtggccctg  
 481 agcaggtgc aggggtctct gcaggacatg ctgtggcagc tggacctcag cctgggtgc  
 541 tgaggccttg aaggtcactc ttctgcaag gactacgta agggaaggaa ctctgcttc  
 601 caggtatctc caggattgaa gagcattgca tggacacccc ttatccagga ctctgcaat  
 661 ttcctgact cctctaagcc actctccaa aggcataaga ccctaagcct cctttgctt  
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 781 gagtgggctg catctgggat tccaccaag gtcttcagcc atcaacaaga gttgtctgt  
 841 cccctcttga ccatctccc cctcactgaa tgcctcaatg tgaccagggg tgattcaga  
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 1381 ggtggggaat gtttgggcag aagggagaag gatctagaat gtgtttctg aataacatt  
 1441 gtgtgggtgg ttctttgaa ggagttagat cattttcta tctctgcaa ttgcttagga  
 1501 tgttttcat gaaaatagct ctccagggg ggtgtgagg cctggccagg caccctctg  
 1561 agagaagttt ctggccctgg ctgaccccaa agagcctgga gaagctgatg ctttgctca  
 1621 aatccatcca gaataaacg caaaggctg aaagccattt gttggggcag tgtaagctc  
 1681 tggcttctc cgactgctag ggagtgtct ttctatcat ggagtgcag tccacactg  
 1741 gtgactgca tctcagagc aggggtcctt ggtgtgacc tctgaatggt ccagggtga  
 1801 tcacactctg gttttattac atggcagtgt tctatttg ggcttgcag ccaaattga  
 1861 gttctgtct gattggtca ccaagcaag gccaaaatta ccaaaaatct tggggggtt  
 1921 ttactccagt ggtgaagaaa actcctttag caggtgttcc tgagacctga caagcactg  
 1981 taggcagtg ccaggactcc ccaggccagg ccaccaggat gcccttccc actggaggtc  
 2041 acattcagga agatgaaaga ggaggtttg ggtctgccac catctgctg ctgtgtttt

Figure 17

2101 gctatcacac agtgggtggt ggatctgtcc aaggaaactt gaatcaaagc agttaacttt  
 2161 aagactgagc acctgcttca tgctcagccc tgactgggtc tataggctgg agaagctcac  
 2221 ccaataaaca ttaagattga ggcttgcctt cagggatctt gcattcccag tggtaaacc  
 2281 gcactacccc atgtgccaaag gtgggtattt taccacagca gctgaacagc caaatgcatg  
 2341 gtgcagtga cagcaggtgg gaaatggtat gagctgaggg gggccgtgcc cagggggccca  
 2401 cagggaaacc tgcttgactt ttgtaacatg ttactttt agggcatctt agcttctatt  
 2461 atagccacat ccttttga aaagataact gagaatttaa aaataagaaa atacataaga  
 2521 ccataacagc caacaggtgg caggaccagg actatagccc aggtcctctg ataccagag  
 2581 cattacgtga gccaggtaat gagggactgg aaccagggag accgagcgtt ttctggaaaa  
 2641 gaggagtttc gaggtagagt ttgaaggagg tgagggatgt gaattgcctg cagagagaag  
 2701 cctgttttgt tgaaggtttt ggtgtgtgga gatgcagagg taaaagtgtg agcagtgagt  
 2761 tacagcgaga ggcagagaaa gaagagacag gagggcaagg gccatgctga agggaccttg  
 2821 aagggtaaag aagtttgata ttaaggagt taagagtagc aagtctaga gaagaggctg  
 2881 gtgctgtggc cagggtgaga gctgctctgg aaaatgtgac ccagatcctc acaaccacct  
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 3001 agagtgtgaa acttctaag tataaatggt tgtctgtttt tgtaacttaa aaaaaaaaaa  
 3061 aaaagtttgg ccgggtgctg tggctcacgc ctgtaatccc agcactttgg gaggccaagg  
 3121 tggggggatc acaaggtcac tagatggcga gcatctggc caacatggtg aaaccccgtc  
 3181 tctactaaa acacaaaagt tagctgagcg tgggtggcggg cgctgtagt cccagccact  
 3241 cgggaggctg agacaggaga atcgctaaa cctgggaggg ggagagtaca gtgagccaag  
 3301 atcgcgccac tgcactcgg cctgatgaca gagcgagatt ccgtctaaa aaaaaaaaaa  
 3361 aaaagtttgg ttttaaaa aatctaata aaataacttt gccccctg

Homo sapiens cholecystokinin (CCK), mRNA.  
 ACCESSION XM\_003225

"GSAAGLLRLETSPQLRPNPKAMNSGVCLCVLMAVLAAGALTQPVPPADPAGSGLQRAE  
 EAPRRQLRVSRQTDGESRAHLGALLARYIQQARKAPSGRMSIVKNLQNLDPSTRISDRD  
 YMGWMDFGRRSAEEYEYPS"

1 ggctcagctg ccgggctgct ccggttgaa acgccaagcc agctgcgtcc taatcaaaa  
 61 gccatgaaca cggcgctgtg cctgtgctg ctgatggcgg tactggcggc tggcgccctg  
 121 acgcagccgg tgcctccgc agatcccgcg ggctccgggc tgcagcgggc agaggaggcg  
 181 ccccgtaggc agctgagggt atgcagaga acggatggcg agtcccgagc gcacctgggc  
 241 gccctgctgg caagatacat ccagcagccc cggaaagctc cttctggacg aatgtccatc  
 301 gttagaacc tgcagaacct ggacccagc cacaggataa gtgaccggga ctacatgggc  
 361 tggatggatt ttggcgtcg cagtggcgag gagtatgagt accctccta gaggaccag  
 421 ccgccatcag cccaacggga agcaacctcc caaccagag gaggcagaat aagaaaacaa  
 481 tcacatcat aactcattgt ctgtggagt tgacattgta tgtatctatt tattaagttc  
 541 tcaatgtgaa aaatgtgtc gtaagattgt ccagtgaac cacacacctc accagaattg  
 601 tgcaaatgga agacaaaatg tttcttcat ctgtgactcc tggctgaaa atgtgttat  
 661 gctattaaag tgatttcatt ctgcc

CCK Promoter (Rat)  
 ACCESSION S70690

1 aattcgcgcg ctaagccgca ttattcagct ttccagacat gtcacaaata cagctaattc

Figure 18

61 ctacaacctg agctgtgtca tggggggggg gggaatcacc cacagcattt aatctgtctc  
 121 tgttttaaac acgttgcttc taagtaaaga gaccgctaga gccacaacca ggaacctaac  
 181 tgctgtgtgc atcacttgcc ttttcatagt ctcctcagc cggaaccccc ccacgtggg  
 241 tgccttctct atttagaaag agtttctaag cctttctct tcacctaga ctggcaaggt  
 301 tgagggtagg ctgagggttg caagactgtg agaaaaggga gccctctct tcttctgt  
 361 cggtagtat ctacgccaag atcctacca cccagtggaa tcccgtact ctagaggaaa  
 421 ggaagaactc tagaggacgg gaagatcatt gcaagctccc ctgatgtgc gagcccagcc  
 481 cgctccactc agccagccag agcttgaggg tgcttgagac actctctggc gccacttgc  
 541 gacaaaatc atcggtagat gtaggctggt gagaagtcat ctgggaaga aatggaacc  
 601 tttcccaa aggtttccg cacaaaaggc aagagctgca cccaggtatc taaaattctg  
 661 taagacgaga atccacagg ccaactgtga ttgagttctg aaaaattgag agccctactc  
 721 cctctctca ctgtgggag cccactcagg tctgaagtgc tccagagaa catgccagaa  
 781 ttacatttgc tgacacctag tctgtgaggg tccccgggt tctggaagg attgatccc  
 841 tcaaagtc ctaaacagt gtcagcttct ccattccaga caaactctg cttctctccg  
 901 ggagtagggg tggcaccctc cctgaagagg actcagcaga ggcaccgaac aggggtggga  
 961 ggaaagctgt ttgataaag aggaggactc atacaaagta ccccgctgg gaggggctat  
 1021 cctcattcac tgggccgttt ccttctccc ggggggccac ttcgatcgtt ggtctctcca  
 1081 gtggctgctc ctgagcacgt gtcctgccgg actgcgtcag cactgggtaa acagatgact  
 1141 ggctgcgtac cgggcggggc tatttaagag gagtcgcct gccgcctgcc ctcaacttag  
 1201 ctggacagca gccgttgaa accgccaagc cagctgactc cgcacccgaa ggtaagtggc  
 1261 tggcagatcc aagaatcat agtgtgaaga actggcctgt agcttgcac ctattgccgt  
 1321 ttgctttc cattttctgt gccttccctc acttgacagc tg

Human messenger RNA for growth hormone (presomatotropin).  
 ACCESSION V00519

"MATGSRTSLLLAFGLLCLPWLQEGSAFPTIPLSRPFDNAMLRAHRLHQLAFDITYQEFEE  
 AYIPKEQKYSFLQNPQTSLCFSES IPTSPNREETQOKSNLELLRISLLLIQSWLEPVQFLRSV  
 FANSLVYGASDSNVYDLLKDLEEGIQ TLMGRLEDGSPRTGQIFKQTYSKFDTNSHNDDA  
 LLKNYGLLYCFRKDMDKVETFLRIVQCRSVEGSCGF"

1 cgaaccactc agggctctgt ggacagctca cctagctgca atggctacag gctcccgac  
 61 gtccctgctc ctggcttttg gcctgctctg cctgccctgg cttaagagg gcagtgcctt  
 121 cccaaccatt ccttatcca ggccttttga caacgctatg ctccgcgccc atcgtctgca  
 181 ccagctggcc ttgacacct accaggagtt tgaagaagcc tatatccaa aggaacagaa  
 241 gtattcattc ctgcagaacc cccagacctc cctctgttcc tcagagtcta tccgacacc  
 301 ctccaacagg gaggaacac aacagaaatc caacctagag ctgctccgca tctcctgt  
 361 gctcatccag tcgtggctgg agcccgtgca gttcctcagg agtgctctcg ccaacagcct  
 421 ggtgtacggc gcctctgaca gcaactgcta tgacctccta aaggacctag aggaaggcat  
 481 ccaaagctg atggggagggc tggaagatgg cagccccgg actgggcaga tctcaagca  
 541 gacctacagc aagttcgaca caaactgaca caacgatgac gcactactca agaactacgg  
 601 gctgctctac tgcttcagga aggacatgga caaggtcgag acattcctgc gcacgtgca  
 661 gtgccgtctc gtggagggca gctgtggctt ctagtgtccc gggtggcatc cctgtgacc  
 721 ctccccagt cctctcctgg ccttggaagt tgccactcca gtgccacca gcctgtcct  
 781 aataaaatta agttgcatc

//

Figure 19

(-1894)

5' \_GAGTGGCGACAGGCTGCTGCTAGCAGGCTCTACACTGAGCTAACCCACCCATAT  
ATATACATAGTTACTATTAGCTTTATTTATATTTTAAAGATTATCATTATATATATAG  
TACACTGTAGTGTCTAGATACACAGAAGAGGCATCGGTCTCTTACAGAGAGCCACC  
ATGTGGTTGCTGGGGATTGAACTCATACCTCTGGCAGAGCAGTCGGTGCTCTTAACG  
CTGAGCCATCTCTCCAGCGCCCCAAAGCCCAGCTTTTAAAAATATTTTAAATTTCT  
TTCTACAGATTGTTTTATGTATATGAGTGTTTTGTGTGTATGCGTTGATGTGTGTACT  
GTGTGCATGGCACATGCCAGTGGGCCACAGACAGAGGGACATGAGATTCCCCTGAA  
ACTTGGAGTTACAGATGGCTGTGGGCTGCCATGTGAGTGAGCGCCTTTGGAACCAAA  
CCTGGGTCCTGCACAAAAGCAACAAGCACTCTTAATCGTTGAGCCACCTCTCCAACC  
CCTTGATATTTCTTTTCGTTGGTGCATTAATAATTGATAAACAGAGGGTTTTCTTTATT  
TAAAGATTTATTTATTTTATGTGAGTACACTGTTGCTCTCTTCAGACACATAGAAGAG  
GGCATTGCTGGATTCTGCTACAGATGGTTGTGAGCCACCATGTGGTTGCTGGGAGTT  
AAACTCAGGACCTCTGGAAGAGCAGTCAGTGCTCTTAACCACTGAGCCATCTCTCCA  
GTCCCTTCCTCAACCTTCTGAGAACAGGCAAACCTCCACCATGATTGGCTTATAAATC  
GTTATATGGACCTACTAAGGATGTAACAACCTGGGAGCATGCTTACCTAGCATGTCCG  
AAACCCGGAGTTCAGTCCCTAGCACTGCACAATCTCAGTCCTTATGAAGTAGAGGGA  
AGATCAGAGGTTCAAGGACAACATCAATTTGAGACCAGCCTGGGCTACTTACCAAA  
GAAAGAAAGAGAGAAATAAATAAATAGATAGATAAATAAATAAATAAGTAAATAA  
ATATCTTATGGCTGGAGAGTTGGTTCAGTGTTAAGAGCACTTATTGTGGGGTTGGG  
GATTTATCTCAGTGGTAGAGCGTTTGCCTAGGAAGCTCAAGGCCCTGGGTTTCGGTCC  
CCAGCTCCGGAAACAAAACAAAACAAAACAAAACAAAACAAAACAAAACAAAAC  
CTGTCTGGAAAACACCTAAATAAAGATATATATATATAATATATATACATATAATAT  
ATATATGATATATATATATATATATATATCTTTGTGGAGGAAGCTATACCTTTCTTTCTT  
GAGCCTCCAACACATAAATGTGCCCTGTCATCCCATTCAATTTGCCCCAAGTGGGAA  
ACCATGTGACTATAAACTCTAAGTTCCTAGTCACTAGGAACCTCTCAAGACACCTACC  
TCAGGCAGCATCACTTCCGGAGTGCCACCATTATCAGTTAACATCCACATCTGGGAT  
TCAGATCCCAGATCCCTTCTGTTCCTCAGAAGTCACCTACAGCTTTGTGGGGGTGC  
CCCTTCCCTCAGAGAGTGCCACCCGAGTTGACCCTCACCAAGGCAACCCTTTGTACC  
CACAGAATCCAACAGGAAGTAGGGGGAAGAACAGCCGGCCCTGTGCCAGAAAAAA  
AGAGGGGAGGGAGAAGGGGGTGCTCAGCCTACCACCGGGCAGGTCCCAGATAACA  
CTGCAGATACCCAAATGTTAATCACCCATTAGCACAGGCCCCAGAGCAAAGGGGAAA  
GTGATTAGGTGTATAATGGGGTTCAGTGGGCAGGAGCAGTGGGCTTGAGCTTCAA  
GATAAGAGGTTTTTCAGGTTAATCAGCACCCCTGTGGTGTGTGGATATAAGGAAGCTAA  
CACAGGGTCTTGAAGCAAGATC\_3' (-1)